4. Go over the human requirements described in the reading and compare them with the requirements the class listed.

Create a final chart like the one below and post this in the classroom for the duration of the unit.

- Question: What do humans need to survive and why?
- *Answer:* Humans need food, water, oxygen, moderate temperature and protection from poisonous gases and high levels of radiation.

Humans need:	Reason:
Food	Gives us energy so that we can move, grow and function. It also gives us nutrients to build and mend bones, teeth, nails, skin, hair, flesh and organs.
Oxygen	Helps us to obtain energy from sugars.
Water	Allows nutrients to circulate through the body, allows the body to filter out waste and poisons and helps to regulate body temperature.
Moderate temperature (Average global temperature below 50° C)	Allows us to maintain an average body temperature of 98.6° F/37°C and to maintain water in a liquid state at all times.
Protection from poisonous gases and high levels of radiation	To prevent cancer, disease and damage to the body.
Gravity	Allows our biological systems to develop and function normally.

5. Students record results and conclusions in the Results and Conclusion sections of their Astro Journal.

Extend/Apply (approximately 20 minutes)

1. Discuss how human survival needs listed on the chart are met on Earth.

- Question: How is our requirement for food met on Earth?
- *Answer:* (Accept all answers without feedback whether they are correct or incorrect.) We gain energy and nutrients from plants and animals that we eat. This energy first comes from the Sun.

- Repeat this discussion for each of the elements on this list. At this point, students may not know all of the answers. They may not know how a moderate temperature is maintained or how we are protected from poisonous gases and radiation. These answers will be discussed throughout Astro-Venture.

2. Introduce the planet comparison activity.

- Divide students into groups. Assign each group a different planet to compare with Earth.